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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/208,962	12/10/1998	RICHARD A. ELCO	4414-D	8858
	590 06/10/2003			
BRIAN J HAMILLA INTELLECTUAL PROPERTY LAW DEPARTMENT			EXAMINER	
	ECTRONICS GROUP IN	GROUP INC ABRAMS, NEIL		
ETTERS, PA			ART UNIT	PAPER NUMBER
			2839	
			DATE MAILED: 06/10/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

Office Astinu O	Application N	8962 Applicant(s)	
Office Action Summary	Examiner		Group Art Upit
-The MAILING DATE of this communication appear	ars on the cover	sheet beneath the cor	respondence address –
Period for Reply		7	•
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET OF THIS COMMUNICATION.	TO EXPIRE	MONTH(S)	FROM THE MAILING DATE
<ul> <li>Extensions of time may be available under the provisions of 37 CF from the mailing date of this communication.</li> <li>If the period for reply specified above is less than thirty (30) days, and If NO period for reply is specified above, such period shall, by defarming the period for reply will, by such period for reply will be per</li></ul>	a repty within the sta ault, expire SIX (6) Me statute, cause the an	tutory minimum of thirty (30 ONTHS from the mailing dat	a) days will be considered timely. te of this communication.
Status	,	_	
Responsive to communication(s) filed on	26-	03	
This action is FINAL.			
☐ Since this application is in condition for allowance exce accordance with the practice under Ex parte Quayle, 19	ept for formal matt 335 C.D. 1 1; 453 (	ers, <b>prosecution as to</b> D.G. 213.	the merits is closed in
Disposition of Claims			
Xclaim(s) 46 - 64		is/are pe	nding in the application
Of the above claim(s)		is/are wit	thdrawn from consideration
□ Claim(s) 46 - 64			ortad
□ Claim(s)		is/are ob	iocted to
□ Claim(s)			
Application Papers		requirem	ent
□ The proposed drawing correction, filed on	is □ app	proved   disapproved	
☐ The drawing(s) filed on is/are objection	ected to by the Ex	aminer	
☐ The specification is objected to by the Examiner.	·		•
$\hfill\Box$ The oath or declaration is objected to by the Examiner.			
Priority under 35 U.S.C. § 119 (a)-(d)			•
☐ Acknowledgement is made of a claim for foreign priority	under 35 U.S.C.	S 119 (a)–(d)	
☐ All ☐ Some* ☐ None of the:		3 · · · · (a) (a).	
☐ Certified copies of the priority documents have been	received.		
☐ Certified copies of the priority documents have been		cation No.	
☐ Copies of the certified copies of the priority documen			•
in this national stage application from the Internation			
*Certified copies not received:			
ttachment(s)			
	lo(s).	☐ Interview Summa	rv. PTO-413
☐ Information Disclosure Statement(s), PTO-1449, Paper N	- (-)-		
<ul> <li>□ Information Disclosure Statement(s), PTO-1449, Paper N</li> <li>□ Notice of Ref rence(s) Cited, PTO-892</li> </ul>		☐ Notice of Informa	Patent Application PTO 450
			Patent Application, PTO-152

U.S. Patent and Trademark Office PTO-326 (Rev. 11/00)

Part of Paper No.

Art Unit: 2839

The rejections of claims 46-64 under 35 U.S.C. 112 and related discussion in last office

action are repeated and incorporated into this letter.

Just how the figs. 1, 2, 3 disclosures, to which these claims are believed to be directed are

to be used in practice is unclear. In the response applicant in explaining the invention only refers to

fig 1. The examiner also notes that features shown in fig1-3 do not clearly relate to figs. 4-33

disclosures and these do not aid in understanding the figs. 1-3 embodiments. For figs 1-3 devices

just how current is applied and signals transmitted is unclear. For claims 48-54, no teaching of

figs. 1-3 device with "solder masses" is present. How claim 48 reads on any figure in the case

should be explained. For claims 46, 54, 56, the disclosure is also lacking for failure to show the

parts arranged in the manner now seen to be intended, as shown in last response, see figure on

page 3. A figure like this was not present in the case as filed. Should the rejections under 35

U.S.C. 112 be overcome, such added figures would be required since all claimed features must be

shown. For side- by- side limitations, sole support is spec. Page 6. Lines 1-3. This is not

adequate for detailed claims now presented. Also clain 46 line 4, terms, "laterally spaced" lacks

basis in disclosure as filed. This also applies to claims 51,56. Note that in the page 3 figure the

ground planes on right are not shown as laterally spaced from those on left.

The claims, as best understood are rejected below on prior art

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Claim 61 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Fedder.

For claim 61 the Fedder connector 12 (see fig 11) includes signal conductors 56 and ground planes 60 on each side of the signal conductors. See attached sketch. A virtual ground plane is not disclosed but it seems clear that one or more would exist between conductors 56 or to the sides of the housing. Alternatively it would have been obvious to design the connectors to have such ground planes since they only involve spacing the contacts far apart enough so as to prevent magnetic coupling between the contacts. Nor does the claim define over such virtual plane at or outwardly of the housing side walls. If crosstalk between contacts were present it would have been obvious to space them further apart and this would result in a ground plane or plane of charge between contacts. The reference is also applied with connectors mated and with combined ground planes 60,110 separating the contacts..

Claims 46,47,51,52, 56,57 are rejected under 35USC (a) as being unpatentable over Fedder.

The above discussion of Fedder is applied in this rejection. It is well known to mount connectors side by side on a circuit board. It would have been obvious to so locate a pair of Fedder connectors 12. This enables many signals to be fed to the mother board. The connectors so mounted would have laterally spaced apart ground planes 60 or 60,110 and a virtual ground plane would exist between the connectors or to the side of some of the contacts 56. This arrangement would meet clain language.

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Claims 48-50, 53-55, 58-60 and 62-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fedder in view of Seidler, Swamy and Romine.

Fedder does not disclose solder mass use. Seidler Swamy and Romine disclose contacts with attached solder masses or balls. It would have been obvious to form Fedder contacts for surface mount with attached solder masses in view of these references. This would enable easier mounting to the pcb.

Response to arguments. See above discussions.

Claims 46, etc are still broadly drawn as to be readable on Fedder. Other rejections are withdrawn as cumulative. As to argument on page 4, see spec page 5, line 7. basis for terms "laterally spaced" if present should be pointed out. Note that figure in Remarks does not show lateral spacing for 13,13 or 15,15. Also a figure like this, but modified as necessary, should be submitted as a proposed figure for entry in the event claims pertinent to that figure are allowed.

Goodman is cited to show connectors mounted side by side on recircuit board to be well known in the art.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR

1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

will the statutory period for reply expire later than SIX MONTHS from the mailing date of this

final action.

Any inquiry concerning this communication should be directed to N. Abrams at

telephone number 308-1729.

Abrams/ek 06/04/03

NEIL ABRAMS
EXAMINER
ART UNIT 322

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